

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Anton E. Skaugset, #38,617, on 9/22/10.

2. The application has been amended as follows:

IN THE CLAIMS:

3. **Claims 1-3, 6, and 7** have been **amended** as follows:

CLAIM 1. (Currently Amended) A locking device for pipe connections, the locking device comprising:

a first and a second connection unit which are threaded and include a female and a male threaded section, respectively, where the connection units are configured to be screwed together to form a pipe connection,

a first and a second locking ring disposed between the first and second connection units and concentric with the pipe connection, each locking ring having a first and a second side; and

an axial lock configured to prevent the first and second locking rings from moving towards each other in an axial direction when engaged;

characterized in that the first and second side of each of the locking rings each comprise a plurality of teeth separated by intermediate notches, such that the teeth and notches on the first sides of the first and second locking rings ~~ring~~ are configured to engage each other; and the teeth and notches on the second sides of the first and second locking rings face the first and second connection units, respectively, and are configured to engage a corresponding number of notches and teeth formed on a shoulder of a facing edge of their corresponding connection units, the number of teeth and notches on the second side of the first ring being different from the number of teeth and notches on the second side of the second ring;

so that upon screwing together of the first and second connection units, the first and second locking rings may be revolved together to a position in which the first and second locking rings ~~they~~ may be spread partially apart in an axial direction to engage the second sides of the locking rings with their corresponding connection units and, at the same time, maintain the mutual engagement between the first sides of the first and second locking rings, so that when the axial lock is engaged to maintain the separation between the first and second locking rings, rotation between the first and second connection units is prevented.

CLAIM 2. (Currently Amended) The locking device according to claim 1, characterized in that the first and second locking rings are arranged to slide rotationally and axially on the connection units while remaining disposed concentrically on the pipe connection.

CLAIM 3. (Currently Amended) The locking device according to claim 1, characterized in that the first and second locking rings are provided with teeth that have parallel flanks, and notches with slanted sides at the sides facing the connection units.

CLAIM 6. (Currently Amended) A method for locking threaded pipe connection units utilizing the locking device according to claim 1, characterized in the following steps:

- screwing the threaded connection units together;
- revolving the first and second locking rings simultaneously to bring the teeth and notches on the second sides of the first and second locking rings into alignment with the corresponding notches and teeth on the shoulders of their corresponding connection units;
- spreading the first and second locking rings partially apart in an axial direction;
- engaging the teeth and notches of the second sides of the first and second locking rings with their corresponding connection units while maintaining the mutual engagement between the teeth and notches of the first sides of the first and second locking rings; and
- engaging the axial lock, thereby locking the connection units with respect to a rotation between the first and second connection units.

CLAIM 7. (Currently Amended) The method according to claim 6, characterized in that the first and second locking rings are manually spread apart in the axial direction, and that engaging the axial lock includes extending one or more locking bolts from one locking ring to the other.

REASONS FOR ALLOWANCE:

4. The following is an examiner's statement of reasons for allowance:

With regard to claim 1, the prior art of record does not teach or suggest a locking device with first and second connection units which are threaded and include female and male threaded sections, respectively, where the connection units are configured to be screwed together to form a pipe connection, first and second locking rings disposed between the first and second connection units and concentric with the pipe connection, each locking ring having a first and a second side; and an axial lock configured to prevent the first and second locking rings from moving towards each other in an axial direction when engaged; wherein the first and second side of each of the locking rings each comprise a plurality of teeth separated by intermediate notches, such that the teeth and notches on the first sides of the first and second locking rings are configured to engage each other; and the teeth and notches on the second sides of the first and second locking rings are configured to engage a corresponding number of notches and teeth formed on a shoulder of a facing edge of the their corresponding connection units, the number of teeth and notches on the second side of the first ring being different from the number of teeth and notches on the second side of the second ring; so that upon screwing together the first and second connection units, the first and second locking rings may be revolved together to a position in which they may be spread partially apart in an axial direction to engage the second sides of the locking rings with their corresponding connection units and, at the same time, maintain the mutual engagement between the first sides of the first and second rings, so that when the axial

lock is engaged to maintain the separation between the first and second locking rings, rotation between the first and second connection unit is prevented.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONCLUSION:

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fannie Kee whose telephone number is (571) 272-1820. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AARON DUNWOODY/
Primary Examiner, Art Unit 3679

/F. K./
Examiner, Art Unit 3679
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